

## NOTES ON GEOGRAPHIC DISTRIBUTION

### **Amphibia, Anura, *Hylodes charadranaetes*, *Ischnocnema octavioi*, and *Euparkerella cochranæ*: Distribution extension.**

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Brazil is the country with the world's richest amphibian fauna, housing over 800 described species of which the great majority are anurans (SBH 2007). Given this impressive biodiversity, it is unsurprising that the current knowledge on the geographic distributions of many Brazilian amphibians is greatly deficient, with several species being known only from their type localities (Pimenta et al. 2005). Nevertheless, a number of species with restricted ranges have had their distributions expanded in recent years (Pimenta et al. 2005; Santos et al. 2005; Dayrell et al. 2006; Leite et al. 2006; Marques et al. 2006; Martins et al. 2006; Vieira et al. 2006; Araújo et al. 2007; Maragno and Souza 2007; Thomé et al. 2007).

The stream-dwelling hylodid *Hylodes charadranaetes* Heyer & Cocroft, 1986, and the leaf litter-dwelling brachycephalids *Ischnocnema octavioi* (Bokermann, 1965) and *Euparkerella cochranæ* Izecksohn, 1988, all endemic to the Atlantic Rainforests of the state of Rio de Janeiro (Rocha et al. 2004), are examples of species that were, until recently, known only from their type localities (Frost 2007). *Hylodes charadranaetes* was described from Alto do Soberbo, in the municipality of Teresópolis (Heyer and Cocroft 1986), *Ischnocnema octavioi* from the Tijuca mountain, in the municipality of Rio de Janeiro (Bokermann 1965), and *Euparkerella cochranæ* from the Serra dos Órgãos National Park, in the municipality of Magé (Izecksohn 1988). Rocha et al. (2000; 2001) reported *Eleutherodactylus* cf. *octavioi* from Ilha Grande, in the municipality of Angra dos Reis, some 100 km west of its type locality. This record, however, was based on two misidentified specimens (currently housed at the *Museu Nacional*, Rio de Janeiro, under the labels MNRJ 47972-3) that actually are attributable to *Ischnocnema* (= *Eleutherodactylus*) *guentheri* (C.

A. G. Cruz, pers. comm.). A recent study (Rocha et al. 2007) reported both *Ischnocnema octavioi* (as *Eleutherodactylus octavioi*) and *Euparkerella cochranæ* from the Guapiaçu Ecological Reserve, in the municipality of Cachoeiras de Macacu, which represents an eastward range extension of ca. 80 km for the former species and ca. 40 km for the latter. Meanwhile, Weber et al. (2007) reported *Hylodes charadranaetes* from another locality in the municipality of Cachoeiras de Macacu, extending that species' distribution 43 km eastward.

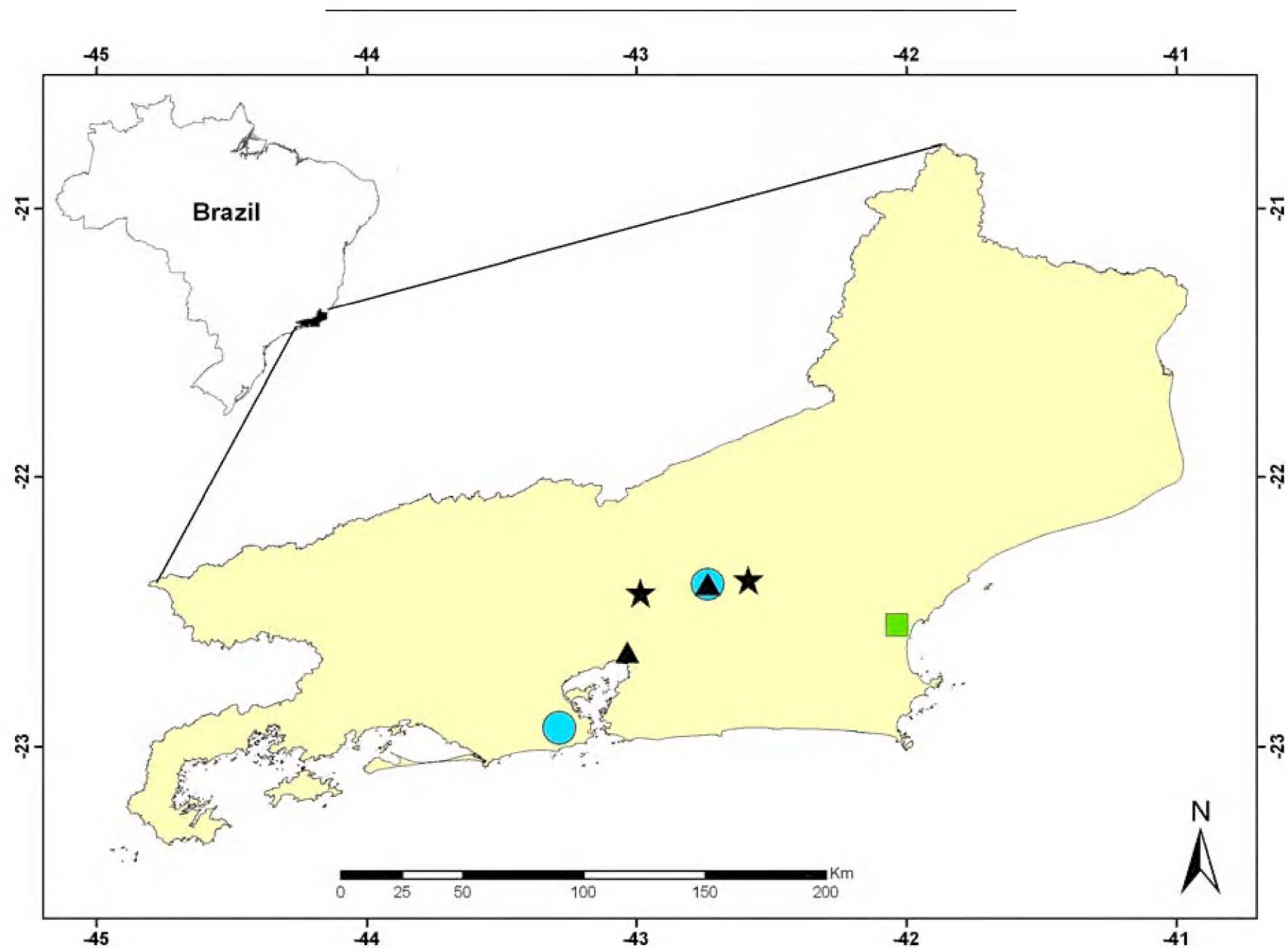
During a herpetofaunal survey carried out between 30 May and 2 June 2005, at altitudes up to 320 m in Morro São João (22°33' S, 42°02' W), a 800 m high mountain covered with Atlantic Forest (Figures 1 and 2) located in the municipality of Casimiro de Abreu, state of Rio de Janeiro, three specimens of *Hylodes charadranaetes* (Figure 3A) measuring 35.5–37.5 mm SVL, two individuals of *Ischnocnema octavioi* (Figure 3B) measuring 14.0–27.3 mm SVL, and one individual of *Euparkerella cochranæ* (Figure 3C) measuring 17.6 mm SVL were collected. All specimens are currently housed at the *Museu Nacional*, Rio de Janeiro (*Hylodes charadranaetes*: MNRJ 40626–8; *Ischnocnema octavioi*: MNRJ 43457–8; *Euparkerella cochranæ*: MNRJ 44625). These records extend the known distribution of *H. charadranaetes* some 60 km eastwards and those of *I. octavioi* and *E. cochranæ* some 75 km eastwards (Figure 2), and suggest that those three species may actually be fairly widespread along the Serra do Mar mountain range in the state of Rio de Janeiro. Also, the record of *Hylodes charadranaetes* represents the lowest altitude at which this species (previously known to occur at altitudes of 700–1400 m; see Weber et al. 2007) has been found.



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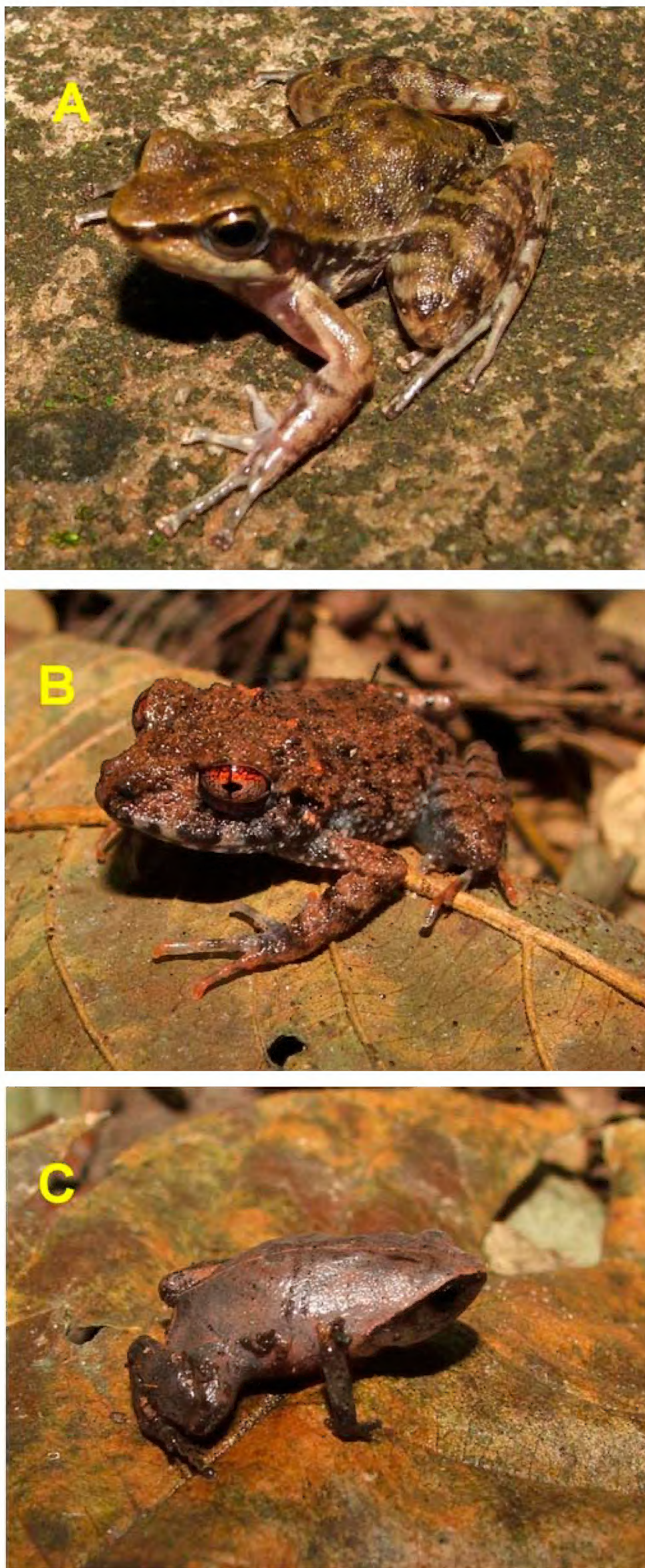
**Figure 1.** View of the Morro São João, in Casimiro de Abreu, state of Rio de Janeiro. Photo by C. F. D. Rocha.



**Figure 2.** Map of the state of Rio de Janeiro showing the previous known records of *Hylodes charadranaetes* (stars) *Ischnocnema octavioi* (blue circles) and *Euparkerella cochranae* (triangles), and the new record for these three species at Morro São João (green square).



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**Figure 3.** Specimens of *Hylodes charadranetes* (A) *Ischnocnema octavioi* (B) and *Euparkerella cochranæ* (C) from Morro São João. Photos by D. Vrcibradic.



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### Literature cited

- Araujo, C. O., T. H. Condez, and C. F. B. Haddad. 2007. Amphibia, Anura, *Phyllomedusa ayeaye* (B. Lutz, 1966): distribution extension, new state record, and geographic distribution map. Check List 3(2): 156-158.
- Bokermann, W. C. A. 1965. A new *Eleutherodactylus* from southeastern Brazil. Copeia 1965(4): 440-441.
- Dayrell, J. S., C. P. Neves, C. S. Cassini, and R. N. Feio. 2006. Geographic Distribution. *Zachaenus carvalhoi*. Herpetological Review 37(3): 360.
- Frost, D. R. 2007. Amphibian Species of the World: an online reference. Version 5.0. Electronic Database accessible at <http://research.amnh.org/herpetology/amphibia/index.html>. American Museum of Natural History, New York. Captured on December 2007.
- Heyer, W. R. and R. B. Cocroft. 1986. Descriptions of two new species of *Hylodes* from the Atlantic forest of Brazil (Amphibia: Leptodactylidae). Proceedings of the Biological Society of Washington 99(1): 100-109.
- Izecksohn, E. 1988. Algumas considerações sobre o gênero *Euparkerella*, com a descrição de três novas espécies (Amphibia, Anura, Leptodactylidae). Revista Brasileira de Biologia 48(1): 59-74.
- Leite, F. S. F., T. L. Pezzuti, and P. L. Viana. 2006. Amphibia, *Bokermannohyla namuzae*, *Scinax curicica*, *Leptodactylus camaquara*, *Physalaemus evangelistai*, and *Proceratophrys cururu*: distribution extensions. Check List 2(1): 5.
- Maragno, F. P. and F. L. Souza. 2007. Geographic Distribution. *Rhinella scitula*. Herpetological Review 38(2): 216.
- Marques, R. M., P. F. Colas-Rosas, L. F. Toledo, and C. F. B. Haddad. 2006. Amphibia, Anura, Bufonidae, *Melanophryniscus moreirae*: distribution extension. Check List 2(1): 68-69.
- Martins, I. A., Gomes, F. B. R., P. H. Bernardo, and A. P. Suarez. 2006. Geographic Distribution. *Cycloramphus carvalhoi*. Herpetological Review 37(1): 99.
- Pimenta, B. V. S., C. F. B. Haddad, L. B. Nascimento, C. A. G. Cruz, and J. P. Pombal Jr. 2005. Comment on "Status and trends of amphibian declines and extinctions worldwide". Science 309: 1999b.
- Rocha, C. F. D., H. G. Bergallo, J. P. Pombal Jr., L. Geise, M. van Sluys, R. Fernandes, and U. Caramaschi. 2004. Fauna de anfíbios, répteis e mamíferos do Estado do Rio de Janeiro, sudeste do Brasil. Publicações Avulsas do Museu Nacional, Rio de Janeiro 104: 1-24.
- Rocha C. F. D., M. van Sluys, M. A. S. Alves, H. G. Bergallo, and D. Vrcibradic. 2000. Activity of leaf-litter frogs: when should frogs be sampled? Journal of Herpetology 34(2): 285-287.
- Rocha C. F. D., M. van Sluys, M. A. S. Alves, H. G. Bergallo, and D. Vrcibradic. 2001. Estimates of forest floor litter frog communities: A comparison of two methods. Austral Ecology 26(1): 14-21.
- Rocha, C. F. D., D. Vrcibradic, M. C. Kiefer, M. Almeida-Gomes, V. N. T. Borges-Junior, P. C. F. Carneiro, R. V. Marra, P. Almeida-Santos, C. C. Siqueira, P. Goyannes-Araújo, C. G. A. Fernandes, E. C. N. Rubião, and M. van Sluys. 2007. A survey of the leaf-litter frog assembly from an Atlantic forest area (Reserva Ecológica de Guapiaçu) in Rio de Janeiro State, Brazil, with an estimate of frog densities. Tropical Zoology 20(1): 99-108.
- Santos, E. M., F. O. Amorim, P. T. P. Brito, and I. J. Roberto. 2005. Geographic Distribution. *Elachistocleis piauiensis*. Herpetological Review 36(3): 332.
- SBH. 2007. Brazilian amphibians – List of species. Accessible at <http://www.sbherpetologia.org.br>. Sociedade Brasileira de Herpetologia. Captured on February 2008.
- Thomé, M. T. C., H. M. Oyamaguchi, and C. A. Brasileiro. 2007. Amphibia, Anura, Leiuperidae, *Physalaemus bokermanni*: distribution extension. Check List 3(1): 1-3.
- Vieira, K. S., C. Arzabe, and W. L. S. Vieira. 2006. Amphibia, Ceratophryidae, Ceratophryinae, *Ceratophrys joazeirensis*: distribution extension. Check List 2(2): 28-29.
- Weber, L. N., M. Bilate, L. S. Procaci, and S. P. Silva. 2007. Amphibia, Anura, Hylodidae, *Hylodes charadranaetes*: distribution extension and notes on advertisement call. Check List 3(4): 336-337.

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